

REMARKS

Claim 19 has been added corresponding to claim 3 except that the other solvent other than aprotic polar solvents comprises a glycol monoalkyl ether and at least one selected from the group consisting of glycol ether carboxylates, carboxylic acid esters, hydroxycarboxylic acid esters, ketones, alkoxycarboxylic acids esters, and cyclic ethers. In claim 19, the glycol ethers are limited to glycol monoalkyl ethers, and moreover, a glycol monoalkyl ether is an essential component. Claim 19 corresponds to Examples 9-14 of the present application, all of which contain propylene glycol monomethyl ether (PM).

Entry of the above amendment is respectfully requested.

Art Rejections

On page 2 of the Office Action, in paragraph 4, claims 3, 12-14, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koyanagi et al. (WO 03/072634, wherein the citations are from the English equivalent document US Pg-Pub 2005/0153530) in view of Wyatt et al. (US PgPub 2003/0118946). On page 4 of the Office Action, in paragraph 5, claims 3, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamayachi et al. (US Patent 4,943,516) in view of Wyatt et al. (US Pg-Pub 2003/0118946). On page 6 of the Office Action, in paragraph 6, claims 6 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamayachi et al. (US Patent 4,943,516) in view of Wyatt et al. (US Pg-Pub 2003/0118946) as applied to claim 3 and in further view of Dhillon (US Patent 4,822,723).

In response, Applicants submit that the present invention is not obvious over the cited art combinations, and request that the Examiner reconsider and withdraw these rejections in view of the reasons of record and the following remarks.

Initially, with respect to new claim 19 in particular, Applicants submit that Koyanagi et al (WO 03/072634, US 2005/0153530) discloses glycol dialkyl ethers including ethylene glycol dimethyl ether as specific examples of solvents, but it does not disclose glycol monoalkyl ethers.

Moreover, with respect to the claims overall, Applicants submit that in addition to the reasons of record, they are not obvious because they provide unexpectedly superior results, as can be seen from the executed Rule 132 Declaration submitted herewith.

For example, as set forth in Experiment 2 in the Declaration, Solvent mixture (3), which falls within the scope of claim 3 of the present application, was remarkably excellent in cleanability. Further, although the difference between Solvent mixture (1) and Solvent mixture (2) was small, the Declaration indicates that the remaining amount of pigment showed that Solvent mixture (1) containing C₁₀ aromatic hydrocarbons (within the scope of the present invention) had higher cleanability than Solvent mixture (2) containing C₁₂ aromatic hydrocarbons (like in Wyatt).

However, the Declaration notes that a carbon number difference in cleanability was small, perhaps because choice of components other than aromatic hydrocarbons was not proper. Instead, the Declaration indicates that the obtained results showed that a solvent mixture containing no alcohol is superior in cleanability to a solvent mixture containing an alcohol.

Thus, as set forth in Experiment 3 (in which solvent mixtures containing no alcohol were prepared), the Declaration indicates that it was found that Solvent mixture (4) containing Solfine®-TM (a basically C₉ aromatic hydrocarbon-based mixed solvent, which is within the scope of the present invention) was superior in cleanability to Solvent mixture (5) containing diisopropylbenzene (a C₁₂ aromatic hydrocarbon as was used in Wyatt) because the remaining amount of pigment in Solvent mixture (4) was smaller than in Solvent mixture (5). Therefore, the Declaration indicates that it has been confirmed that cleanability varies with the carbon number of the aromatic hydrocarbon that is used.

Further, the Declaration indicates that although a basically C₉ aromatic hydrocarbon-based mixed solvent Solfine®-TM was used in Solvent mixture (4), aromatic hydrocarbons having 10 carbon atoms have approximately the same cleanability as aromatic hydrocarbons having 9 carbon atoms.

The Declaration indicates that for reference, Solvent mixture (3), which falls within the scope of claim 3 of the present application, was also evaluated for cleanability, and good results were obtained. The Declaration notes that the results show that Solvent mixture (3) has higher cleanability for a photosensitive composition (a resist material) containing a black pigment than Solvent mixture (4).

In view of the evidence presented in the Declaration, the Declarant concludes that the present invention provides unexpectedly superior results.

Therefore, the present invention is not obvious for this additional reason.

Thus, Applicants submit that the present invention is not obvious over the cited art combinations, and withdrawal of these rejections is respectfully requested.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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Respectfully submitted,



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